APPENDIX B

Management Plan for Archaeological Resources within the Hellhole Canyon Preserve San Diego County

MANAGEMENT PLAN FOR ARCHAEOLOGICAL RESOURCES WITHIN THE HELLHOLE CANYON PRESERVE, SAN DIEGO COUNTY

Hellhole Canyon Preserve Survey - ASM Project #: 12490

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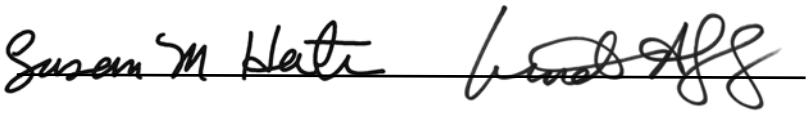

October 2008

NATIONAL ARCHAEOLOGICAL DATABASE INFORMATION

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Report Date: October 14, 2008

Report Title: Management Plan for Archaeological Resources within the Hellhole Canyon Preserve, San Diego County

Type of Study: Archaeological Survey

New Sites: CA-SDI-19058, CA-SDI-19059, CA-SDI-19060, P-37-029802, P-37-029803, P-37-029804

Updated Sites: CA-SDI-9685

USGS Quad: Rodriguez Mountain 7.5' USGS Topographic Quadrangle Ranges 1E and 1W, Township 11S (San Bernardino Base Meridian)

Acreage: 439

Permit Numbers: Not applicable

Keywords: Luiseño, La Jolla Band of Luiseño Indians, Rincon Luiseño Band of Indians, Pauma Yuima Band of Mission Indians, Pala Band of Mission Indians, Hellhole Canyon, Rodriguez Mountain, Escondido Canal, Escondido Flume, San Luis Rey Flume, San Luis Rey River, Escondido Mutual Water Company, Bear Valley, Lake Wohlford, Wohlford Dam, Paradise Mountain, Homesteading, Valley Center, San Luis Rey Flume Company, Escondido Irrigation District, Escondido Mutual Water Company, Lithic Scatter, Ceramic Scatter, Milling Slicks, Bedrock Mortars, Basins, Ovals, Cupules, Rodriguez Mountain USGS 7.5-minute Quadrangle Map

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LIST OF ACRONYMS AND ABBREVIATIONS

ASM ..... ASM Affiliates
ASMD ..... Area Specific Management Directives
BP ..... Before Present
CEQA ..... California Environmental Quality Act
DPR ..... Department of Parks and Recreation
GIS ..... Geographical Information Systems
GPS ..... Global Positioning System
MYA ..... Million Years Ago
NADB ..... National Archaeological Database
NAHC ..... Native American Heritage Commission
NHPA ..... National Historic Preservation Act
NRHP ..... National Registry of Historic Places
Preserve ..... Hellhole Canyon Preserve
RMP ..... Resource Management Plan
RPO ..... Resource Protection Ordinance
TAIC ..... Technology Associates International Corporation
USGS ..... United States Geological Survey
UTM ..... Universal Transverse Mercator

EXECUTIVE SUMMARY

ASM Affiliates, Incorporated (ASM) conducted a survey of 439 acres (in areas with less than 20 percent slope) within the 1,907.1-acre Hellhole Canyon Preserve (Preserve) in San Diego County, California. This report summarizes the natural and cultural setting of the Preserve, the results of the survey, and the recommendations for the management of cultural resources within Preserve.

ASM conducted a record search and Native American consultation in December 2007 and January 2008. ASM conducted surveys from April 2008 to May 2008 to assess cultural resources within the Preserve in accordance with County of San Diego California Environmental Quality Act (CEQA) procedures and 36 CFR 60.4.

The surveys revealed prehistoric and historic cultural resources within the Preserve. The survey crew identified numerous cultural resources that included bedrock-milling complexes, a lithic scatter, a ceramic scatter, the location of the former Escondido Canal/San Luis Rey Flume, and a homestead within Preserve. Some of the milling slicks on the bedrock were remarkably intact. Some bedrock surfaces had been exfoliated by fires in the area. Three previously unrecorded sites, one previously unrecorded linear feature, and two previously unrecorded isolates were recorded; one site record was updated.

None of the cultural resources located within the project area have been evaluated for eligibility for inclusion in the San Diego County Local Register of Historical Resources, the California Register, or the National Register; therefore, it is assumed that they should be treated as eligible. Both the California Register and the National Register include criteria for evaluation of eligible resources.

No human remains were encountered. However, this does not preclude their presence at the sites.

Portions of the existing trails pass through or are adjacent to four of the recently recorded archaeological sites and one isolate. These trails do not pass through and are not adjacent to any previously recorded sites. The County of San Diego Department of Parks and Recreation (DPR) is proposing to construct additional trails in the Preserve; impacts could occur. This report provides measures to take if DPR detects impacts to cultural resources.

Field notes and photographs are on file at ASM. No artifacts were collected. This report will be submitted to Technology Associates International Corporation (TAIC) and to the South Coastal Information Center (SCIC). The site records associated with cultural resources observed during the survey have been submitted to and are on file at the SCIC. They are included in Appendix C of this document.

1.0 INTRODUCTION

San Diego County (County) Department of Parks and Recreation (DPR) contracted Technology Associates International Corporation (TAIC) to perform a Phase I Cultural Resources survey in the 1,907.1-acre Hellhole Canyon Preserve (Preserve) located in north central San Diego County (Figure 1). Technology Associates International Corporation hired ASM Affiliates as a subcontractor to assess cultural resources within the Preserve in accordance with County of San Diego California Environmental Quality Act (CEQA) procedures and with 36 CFR 60.4.

DPR is responsible for the management and monitoring of the Preserve. According to the task order under which ASM is operating, the County will manage the Preserve under a Resource Management Plan (RMP) including Area Specific Management Directives (ASMDs) that will be prepared based upon the survey information that ASM provides.

Figure 1. Project vicinity.

1.1 PROJECT DESCRIPTION

ASM Affiliates, Incorporated (ASM) conducted a survey of 439 acres (areas with less than 20 percent slope) within the Preserve in San Diego County, California from April 2008 to May 2008. On February 28, 2008, ASM visited the Preserve to ensure that biological studies would not impact cultural resources. The purpose of the survey was to identify and map cultural resources and to recommend a management plan for these resources to the DPR. The management guidelines are designed to prevent impacts to cultural resources within the Preserve. The survey included Native American participation.

The Preserve is located approximately four miles east of Valley Center, California and approximately 12 miles northeast of Escondido, California (Figure 1). The Preserve is found on the USGS Rodriguez Mountain 7.5 minute quadrangle in Sections 11, 12, 13, 14, 15 of Range 1W, Township 11S and Section 7 of Range 1E, Township 11S (Figure 2). The area that was surveyed is the portion that is not shown in yellow (Figure 3). The northeast corner of the San Pasqual Indian Reservation meets the southeast corner of the Preserve, and the southeast corner of the Rincon Indian Reservation meets the northwest corner of the Preserve. The southwest corner of the La Jolla Indian Reservation lies approximately three miles north of the northeast corner of the Preserve. The northwestern boundary of Rancho Guejito is one mile southeast of the Preserve.

1.2 EXISTING CONDITIONS

The Preserve contains a rich natural and cultural environment. The existing environmental and cultural settings are described below.

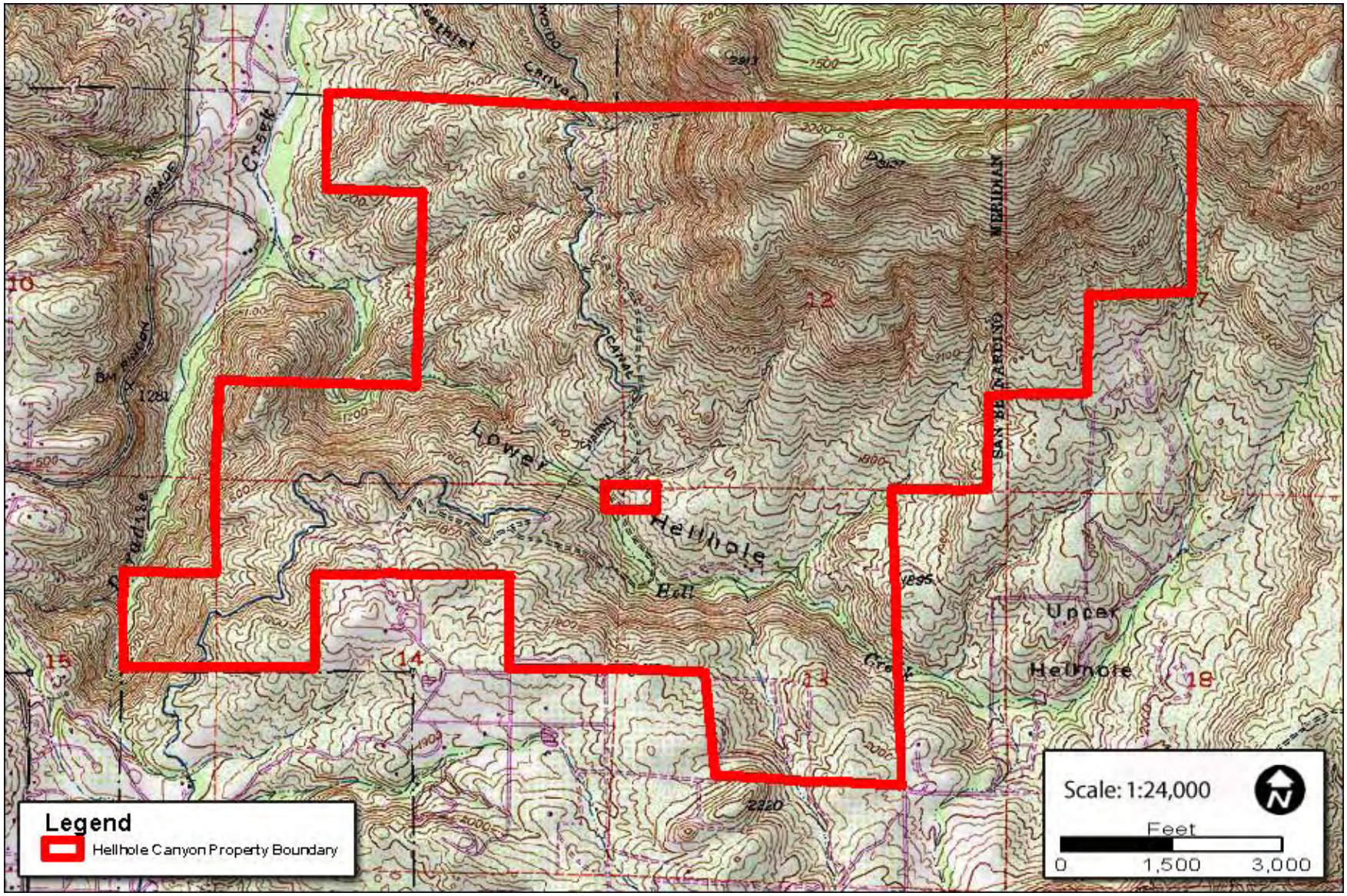

Figure 2. Hellhole Canyon Preserve.

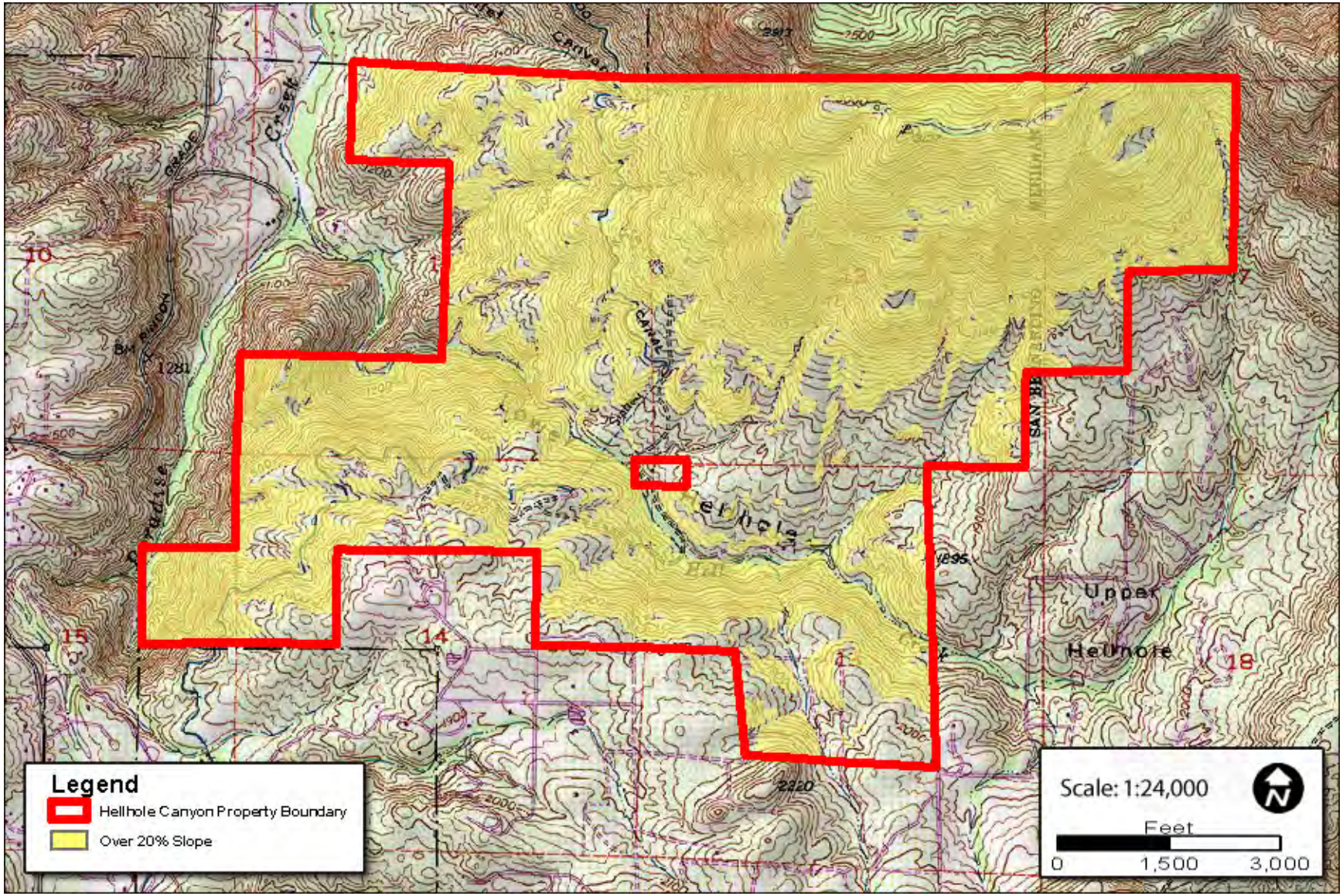

Figure 3. Hellhole Canyon Preserve survey area.

1.2.1 Environmental Setting

Natural

The Preserve is located in a lower chaparral biotic zone in the peninsular ranges of southern California and contains oak riparian woodlands along Hell Creek. Elevations in the property range from approximately 1,200 feet above sea level to 3,127 feet above sea level. Hell Creek passes through the southern portion of the Preserve, Horsethief Canyon feeds into the northwest portion of the Preserve, and small seasonal drainages run throughout the property.

Mesozoic (65-245 million years ago [MYA]) granitic rock and Quaternary (1.6 MYA to present) sedimentary deposits characterize this portion of the peninsular ranges (Wagner and Maldonado 2000). The San Diego Museum of Natural History (n.d.) indicates that these granitic and gabbroic rock types were formed during the latter part of the Mesozoic Era in the Cretaceous Period. The granitic and gabbroic rocks are part of the western zone of the Peninsular Ranges Batholith (San Diego Museum of Natural History n.d.). A batholith is intrusive igneous rock that appears to have solidified deep below the surface of the earth. Kennedy (2006) notes that the area of preserve contains plutonic rocks of type Kgd (Cretaceous quartz diorite and gabbro) and type Kgb (Cretaceous gabbro). The surfaces of many of the granite outcrops in the Preserve are extremely exfoliated and/or are in the process of exfoliating, perhaps because of the many fires that have come through the canyon. Storie and Weir (1951:46) describe the soils of this area as "residual soils of very shallow depth to bedrock."

Oak woodlands, sage scrublands, and grasslands typical of the lower chaparral biotic zone occupy the Preserve. The 2003 Paradise Fire and the 2007 Poomacha Fire burned portions of the project area.

Native plants observed during our survey include *Salvia apiana* (white sage), *Salvia mellifera* (black sage), *Arctoatphylo glauca* (big berry manzanita), *Quercus agrifolia* (coast live oak), *Quercus berberidifolia* (inland scrub oak), *Juncus* spp., *Heteromeles arbutifolia* (Toyon), *Ceonothus crassifolius* (ceanothus, wild lilac), *Eriogonum fasciculatum* (California buckwheat), *Toxicodendron diversilobum* (poison oak).

Fauna that have occupied the area include *Felis concolor* (mountain lion), *Buteo jamaicensis* (red-tailed hawk), *Odocoileus hemionus* (mule deer), *Canis latrans* (coyote) rabbits, lizards, horned lizards (horny toads), and garter snakes. Of these, the *Buteo jamaicensis* (red-tailed hawk) and *Thamnophis hammondii* (two-striped garter snake) were observed during the cultural resources survey.

Cultural

The Luiseño occupied the region of the Preserve before contact with Europeans. The Luiseño used oaks for harvesting acorns and grass for harvesting seeds, two of their main staples. Acorns were milled in bedrock mortars and acorns and grass seeds were milled on milling slicks. The process of continued milling formed the mortars and slicks that are apparent today.

Occupation areas included a series of permanent villages and seasonal settlements. Seasonal settlements revolved around resource attainment, which included seed gathering and deer and rabbit hunting. Settlement patterns may have reflected the following of herds of big game (deer) into the higher elevations during the summer and occupying higher elevations during the summer to be closer to water and resources. People harvested acorns during the fall and were able to store acorns over long periods.

Human Occupation Prior to 11,500 B.P.

The beginning of human occupation in the New World is still debated. A widely accepted model is that humans first entered the western hemisphere between 15,000 B.P. and 12,000 B.P. (Meltzer 1993). Further investigation would be needed to determine the age of sites in the Preserve but no sites from this time period have been identified.

Paleo-Indian Period (11,500-8500/7500 B.P.)

The Paleo-Indian period begins with Clovis occupation, a widespread phenomena in North America. Noted for its distinctive tool kit characterized by fluted points, Clovis occupation dates to the end of the Pleistocene, from 11,200 B.P. to 10,600 B.P. (Meltzer 1993). The Paleo-Indian period in San Diego County is considered to date to the late Pleistocene and the early Holocene, from 10,000 B.P. to 8500/7500 B.P. (Moratto 1984; Warren et al. 1993). Further investigation would be needed to determine the age of sites in the Preserve but no sites from this period have been identified.

The relationship between Paleo-Indian (San Dieguito) and (possibly) later Archaic (La Jolla) sites has been debated (Gallegos 1987; Moriarty 1966; Warren et al. 1993). San Dieguito sites have been characterized by an emphasis on hunting through a predominance of flaked tools, and La Jolla sites have been characterized by the introduction of ground stone as evidence of seed–gathering activities. The debate is based on whether or not San Dieguito sites are chronologically earlier than La Jolla sites, whether or not San Dieguito sites contain ground stone artifacts, and whether or not (possibly subsequent) Archaic sites have a strong bifacial tool component. An alternative interpretation considers that San Dieguito and La Jolla sites may be functional variants of a single adaptive system and that San Dieguito sites represent specialized quarrying or hunting locales (Gallegos 1987). One of the major difficulties in resolving this issue is the scarcity of sites with early Holocene subsurface assemblages (Warren et al. 1993).

Archaic Period (9000/8500 B.P. - 1300/800 B.P.)

The Archaic period followed the Paleo-Indian period. A major distinction has been made between shell midden Archaic sites near the coast and non-shell midden Archaic sites inland. Coastal Archaic sites (often called the La Jolla complex) are characterized by shell midden, flaked cobble tools, basin metates, manos, discoids, and flexed burials. Subsistence appears to have been based on marine mollusks, fish, seeds, and roots. Inland sites in northern San Diego County for this time period are often called the Pauma complex and reflect a subsistence that was based upon inland resources. Further investigation is needed to determine age of sites in

the Preserve; some of the sites in the Preserve may have an Archaic component, but none appear to date from this period.

Rogers (1945:170-171) considered the Paleo-Indian (San Dieguito) and Archaic (La Jolla) occupations to be representative of different populations, as did Warren (1968). Later research, however, considered the potential for transitional coastal sites and cultural continuity (Kaldenberg 1982). Another view considers the early Archaic and Paleo-Indian sites to be contemporaneous expressions of a single settlement system (Gallegos 1987).

A series of 25 sites that pre-date the Late Prehistoric period in inland northern San Diego County were termed the Pauma complex by True (1958). These sites were set on hills that overlook running water sources. As a complex, they were considered distinct from coastal Archaic sites because of their superficial nature and the lack of shellfish and bone. True (1958) interpreted the main subsistence of the people who had settled these sites to be based on seed gathering because of the predominance of grinding stones in the tool assemblages. Many similarities with coastal Archaic adaptations were recognized, but milling stones were more frequent in the Pauma complex sites, while scraping and planning tools and hammer/choppers may have been more common on the coast. The presence of these tools in these respective areas speaks to the need for different tools for different subsistence strategies. Milling stones correspond to the seed-gathering patterns of those who occupied the inland areas, and the hammerstones correspond to the mollusk-collecting patterns of those who occupied the coastal areas. The Pauma complex may represent a contemporaneous inland and/or possibly seasonal expression of the coastal Archaic (La Jolla).

Late Prehistoric Period (1300 / 800 B.P. - 200 B.P.)

The onset of the Late Prehistoric period in San Diego County is generally considered to have occurred between 1300 B.P. and 800 B.P. (Moratto 1984; Rogers 1945; Warren et al. 1993). The beginning of this period may vary within the region (possibly occurring earlier in the east and later in the west). This period is associated with the ethnographic and ethnohistoric record of local Native Americans. Highly-publicized linguistic and territorial designations are reflective of this time period.

The Late Prehistoric period features the development of small, pressure-flaked projectile points that indicate bow and arrow technology, the appearance of ceramics, the replacement of flexed inhumations (in which the body was buried in a “fetal” position) with cremations, and an emphasis on inland plant food collection and processing, especially of acorns (Meighan 1954; Rogers 1945; Warren 1964, 1968). Seven of the sites in the Preserve appear to date from this period; however, further investigation would be needed to confirm that the Preserve was only occupied by Native Americans during the Late Prehistoric Period. .

Ethnographic Period

Shoshonean language-speaking (the Cupan/Takic branch of the Shoshonean group of the Uto–Aztecan language family) Luiseño (Puyumkowitchum/Ataxum) groups occupied the San Diego, southern Orange, and southeastern Riverside counties through the Ethnohistoric period

into the twenty-first century. They are linguistically and culturally related to the Gabrielino and the Cahuilla. The Preserve is within Luiseño territory.

The Luiseño inhabited what is now the Preserve; it may have provided a corridor between the area to the north and south. The San Luis Rey River provided many resources during prehistoric and ethnohistoric times, and many permanent settlements were maintained near the river. Access from the river valley to sites in the survey area could have been achieved by passing through the Preserve and Horsethief Canyon.

Settlement patterns of hunter-gatherers such as the Luiseño were influenced by subsistence factors. The effective exploitation of any particular resource used for food, medicine, or manufacture was tied to the seasonal availability of primary resources. The flora and fauna exploited by Native American populations of this area of southern California were diverse. The Luiseño divided the year into eight seasons (ten months) by when certain seeds and fruit were available. The season or month was named for the environmental characteristics that manifest themselves in that season or month (DuBois 1908:165; Boscana 2005:66).

Diverse biological zones that vary according to elevation and proximity to the coast provided an array of resources. Plant and animal resources of the highlands are distinct from those on the coast. Oaks are concentrated in the highlands while marine fish and shellfish are available on the coast. Settlement patterns were closely tied to the availability of local plant and animal resources.

The diet of the Luiseño included both plant and animal foods. The plant foods were high in fat, carbohydrates, and protein, and thus provided a high-energy diet. Some of the plants exploited for food included acorns, annual grass seeds, yucca, manzanita, sage, sunflowers, lemonade berry, chia, and various wild greens and fruits. These plants were available seasonally: elderberries are available during July and August, chia is available mainly in June, acorns are available in the fall, and many grasses are available in the spring, summer, and fall. Storage allowed these resources to be consumed throughout the year.

Most ethnohistoric accounts emphasize that acorns, gathered in the highlands, were the most important food source for the Luiseño. Several types of oaks are present within the Preserve.

Exploited animal resources included deer, antelope, bear, rabbit, jackrabbit, woodrat, mice, ground squirrels, valley and mountain quail, doves, ducks and other birds, fish, and marine shellfish. The Luiseño avoided hunting all predator animals, tree squirrels, and most reptiles (Bean and Shipek 1978). Hunting in recent times employed a bow and arrow and was carried out individually or in groups. Like in many other areas of California, deer were tracked and stalked, while smaller game, including rabbit, was caught with curved throwing sticks, nets, slings, traps, or deadfalls through game drives. Bones of rabbit and other small animals were dried and pounded into a powder to mix into other foods as seasoning and additional nourishment (Waugh 1986).

Coastal marine animals utilized as food included sea mammals, crustaceans, fish, and mollusks. Some fish were only available seasonally, while other fish were available throughout the year. Trout and other fish, when available in inland drainages and mountain streams, were exploited with traps, nets, or poison.

Settlement of coastal southern California followed a pattern of permanent villages and temporary hunting and gathering camps. Houses were conical structures of willow frames covered with brush, with subterranean floors and central hearths. Other structures included sweathouses, ceremonial enclosures, ramadas, and acorn granaries. Domestic implements included wooden utensils, baskets, and ceramic cooking and storage vessels, and stone milling equipment.

Seasonality and scheduling of resource exploitation were critical elements of the cultural adaptive system interwoven with the settlement patterns. Storage of both plants and animals was practiced regularly among the Luiseño and was often considered a necessity. The seasonal availability of acorns, yucca, and grasses dictated long-term planning of resource exploitation. Ethnohistoric accounts emphasize the dearth of winter resources and how people were forced to depend on stored foods including acorns, dried fish, and other plant foods. Some fish species were available in the winter but they were mainly bottom-dwelling species, small sardine schools, and mackerels (Tartaglia 1976:46). Some accounts indicate that coastal communities exploited local shellfish in the winter (Sparkman 1908). During times of scarce resources, the interior Luiseño traveled to the coast to obtain shellfish, fish, and even some land mammals. Bean and Shipek (1978) note that most inland groups had fishing and gathering locations on the coast that they visited annually when the tides were low or when the inland resources were scarce, typically during the months of January through March. The flora and fauna that is found in Hellhole Canyon would have provided food and medicine for the Luiseño.

All accounts emphasize that populations were concentrated on the highlands for the acorn harvest during the months of October and November. Adaptations included management of resources, food storage, and migration in response to changing availabilities of resources. Fire was employed as a crop-management and path-clearing technique and for community game drives. The annual produce return from various plant resources such as grass seeds, some greens, and yucca was maintained by burning the landscape at least every third year (Bean and Shipek 1978). These techniques prevailed throughout southern California.

The settlement pattern and subsistence systems of the Luiseño, like those of other California groups, were tailored to exploit the seasonal fluctuations in resources and employed movements of populations from mountain slopes and highlands to valley floors and coastal strips. The duration and location of settlement areas were dependent on the availability of plant and animal resources. The settlement pattern was characterized by aggregation and segregation of people around plant and animal resources. Hellhole Canyon appears to have provided a resource catchment area and a thoroughfare between permanent settlements. The sites there do not appear to be permanent villages, and the terrain is steep except for the course of the creek.

The floral and faunal resources found in the park currently would have provided the Luiseño with food and medicine in the past. It is likely that the Luiseño used the land within the Preserve for hunting and gathering during the Ethnographic Period, but locations within the Preserve have not been documented as having been occupied by the Luiseño during the Ethnographic Period. The Luiseno may have used trails through the Hellhole Canyon area to access the San Luis Rey River drainage.

Historic Period

Spanish

Spanish *padres* encountered coastal villages of Native Americans in 1769 with the establishment of *Mission San Diego de Alcalá*. Missions "recruited" Native Americans to use as laborers and to convert them to Catholicism. This had a dramatic affect on traditional cultural practices. Mission life, along with the introduction of European diseases, greatly reduced the Luiseño population. However, many villagers continued to maintain many of their traditional customs while adopting the agricultural and animal husbandry practices learned from Spaniards.

Spanish infiltration into Alta California spurred the establishment of the Mission of San Juan Capistrano in 1776; this mission had initial jurisdiction over the northern part of San Diego County. Mission San Luis Rey de Francia was founded in 1798 in what is now Oceanside, California. These missions "recruited" coastal Native Americans to use as laborers and to convert them to Catholicism, which had a dramatic affect on traditional cultural practices. Padre Antonio Peyri established an outpost of the mission, the Asistencia San Antonio de Pala, 20 miles inland at Pala in 1816 (Sparkman 1908:191). At the time of contact, the Luiseño population may have ranged from 5,000 to 10,000 individuals. "Missionization" and the introduction of European diseases greatly reduced populations. However, many continued to maintain traditional customs while adopting agricultural and animal husbandry practices.

Franciscan friars called the Shoshonean inhabitants of northern San Diego County "Luiseños" after their association with the San Luis Rey Mission. The friars named the San Luis Rey River after they established the San Luis Rey Mission in the heart of Luiseño territory. Luiseño territory encompassed an area from roughly Agua Hedionda on the coast, east to Lake Henshaw, north into Riverside County, and west through San Juan Capistrano to the coast (Bean and Shipek 1978; Kroeber 1970). The Luiseño shared boundaries with the Gabrieliño, the Juañeno, and the Serrano to the west and northwest, the Cahuilla to the east, the Cupa to the southeast, and the Kumeyaay to the south. All these groups except the Kumeyaay (Ipai/Tipai or Northern Diegueño/Diegueño) belong to the Takic subfamily of the Shoshonean family of Uto-Aztecan languages (Bean and Shipek 1978). No Spanish period sites have been identified within the Preserve.

Mexican

In 1821, Mexico gained its independence from Spain, and in 1834, missions were secularized. Political imbalance and a series of Native American uprisings against the Mexican rancheros ensued. Many Luiseño left the missions and ranchos and returned to their original village

settlements (Cuero 1970). In 1843, Governor Manuel Micheltorena granted nearby Rancho Rincón del Diablo ("Devil's Corner") to Juan Bautista Alvarado. Although an account (Whetstone 1963) states that the rancho may have been named "Devil's Corner" because of its distance from mission jurisdiction, some may argue that the heat of the valley contributed to its naming. Micheltorena granted nearby Rancho Guejito y Cañada de Palomia to José María Orozco in 1845 (Pourade 1966; Coons 2005).

American (United States of America)

The United States gained Alta California from Mexico in 1948 and admitted California as a state in 1850. The Luiseño were recruited as laborers and may have experienced even harsher treatment than they had before. Conflicts between Native Americans and encroaching settlers led to the establishment of reservations for some villages. Other mission groups were displaced from their homes and moved to nearby towns or ranches. The reservation system may have interrupted social organization and settlement patterns, yet many traditional practices continue today.

Several bands of Luiseño reside near the Preserve. These include the La Jolla Band, the Pauma/Yuima Band, and the Rincon Band. The San Pasqual Band resides adjacent to the Preserve. Members of the San Pasqual Band of Mission Indians are of Kumeyaay heritage. Their original homeland is the San Pasqual Valley, east of Escondido. Neighbors to the northwest of the Preserve include the Pala Tribe of Mission Indians. Some members of the Pala Tribe are of Cupa (Kuupangaxwichem) heritage and occupied the area near the Warner Springs region of San Diego near Lake Henshaw and the headwaters of the San Luis Rey River. In 1852, Juan José (Jonathan Trumbull) Warner laid claim to the majority of Cupa lands (Pala Band of Mission Indians 2006:n.p.). In 1880 California Governor John Downey bought the land and filed a federal suit that called for the expulsion of the Cupa from the land. In 1901 the United States Supreme Court approved the removal of the Cupa from their territory (Pala Band of Mission Indians 2006). In 1903 the Cupa experienced their own Trail of Tears when they were "escorted" 40 miles west to the Pala Reservation to join the Luiseño who were associated with the Asistencia San Antonio de Pala (Hyde and Elliot 1994:895; Pala Band of Mission Indians 2006).

In California overall, mission groups were displaced from their homes and moved to nearby towns or ranches. The reservation system may have interrupted social organization and settlement patterns, yet many aspects of original culture practices exist today.

The homestead years brought many settlers to nearby Valley Center and Escondido. Evidence of a homestead remains in the Preserve; one complex of structures is located in the survey area, and another is located in the private inholding within the southern portion of the Preserve. This latter complex was not recorded for this report since it is not part of the Preserve. The Escondido Irrigation District and Escondido Mutual Water Company began to bring water through what is now the Preserve from the San Luis Rey River in the late nineteenth century.

1.2.2 Record Search Results

ASM Affiliates Associate Archaeologist Michelle Dalope requested that the California Native American Heritage Commission (NAHC) search their files for any recorded Traditional Cultural Properties, burials, or Sacred Lands within one mile of the project survey area. The NAHC provided a list of Native American contacts; ASM Affiliates Associate Archaeologist Linda Akyüz notified the tribal representatives on the NAHC list (Appendix A). Responses from tribal members and correspondence between tribal members and Ms. Akyüz are located in Appendix B.

Ms. Akyüz conducted a records search of the historical archives of the County of San Diego, Department of Parks and Recreation, History Research Center (History Center). This search included cultural resources found within one mile of the Preserve.

Ms. Akyüz conducted a records search of Escondido Irrigation District and Escondido Mutual Water Company primary documents at the Pioneer Room at the Escondido Public Library.

Ms. Dalope requested a one-mile buffer record search from the South Coastal Information Center (SCIC). Ms. Akyüz reviewed and summarized the records search.

Previous Studies

The SCIC has a record of 33 archaeological studies that were conducted within a one-mile radius of the Preserve. The studies are listed in Table 1. Studies that included a portion of the Preserve appear in bold type.

Table 1. Cultural Resources Studies Located within a One-Mile Radius of the Preserve

NADB Number	Author	Firm	Year	Title
1120063	American Pacific Environmental Consultants, Inc.	American Pacific Environmental Consultants, Inc.	1980	Archaeological Study for Bamber Property
1120072	American Pacific Environmental Consultants Inc.	American Pacific Environmental Consultants Inc.	1979	Archaeological Investigation on Choumas Lot Split Valley Center, California
1120121	Banks, Thomas J.	Have Mule Will Travel	1980	Archaeological Survey Surface Collection and Test Excavation at Site W-2586 Near Woods Valley, San Diego County
1120300	Bull, Charles and Paul H. Ezell	San Diego State University	1974	An Archaeological Survey for the Escondido Mutual Water Company Relocated Water Line..
1120382	Berryman, Stanley R.	TMI	1988	P87-072, Log # 87-9-36. Hell Hole Creek
1120593	Chace, Paul G.	Chace, Paul G.	1984	A Cultural Resources Survey for the Central Valley Center Sewer SWCB Project No. C-06-1567.

NADB Number	Author	Firm	Year	Title
1120765	Chace, Paul G	Paul G. Chace and Associates	1987	1987 Addendum, A Cultural Resources Survey for the Central Valley Center Sewer
1120797	Eckhardt, William T.	Cornerstone Research	1981	Archaeological Reconnaissance of Proposed Flood Control Improvements Along the Southern Boundary Rincon Indian Reservation San Diego County, California.
1121146	Leeper, Karlene	Affinis Environmental Services	1989	Live Oak Ranch Historical Background
1121516	Van Horn, David M.	Archaeological Associates	1978	Archaeological Survey Baker Lot Split, Valley Center
1121284	Napton, L. Kyle and E. A. Greathouse	American Indian Resource Organization, Inc.	1984	Cultural Resource Investigations, San Pasqual Indian Reservation, California.
1121566	Smith, David D. and Associates	David D. Smith and Associates.	1973	Report on the Archaeological Resources of the Paradise Mountain Estates Development Site San Diego, California
1121994	**Cook, John R.**	**ASM Affiliates, Inc.**	**1989**	**Cultural Resource Survey Los Hermanos Between Conchita Road and Kiavo Road**
1122973	Roybal, Gerald J.	Roybal & Associates	1995	Reconnaissance Survey for The San Pasqual Indian Reservation Proposed Road Surfacing And Construction
1123784	Clevenger, Joyce M.	Henry Properties Corporation	1999	Cultural Resource Survey of the Rancho Los Gatos Property, Valley Center, California
1124160	Scientific Resources Surveys, Inc.	Scientific Resources Surveys, Inc.	1989	Archaeological Reconnaissance Report for the Paradise Mountain Development, Valley Center, California
1125020	**County of San Diego**	**County of San Diego**	**1983**	**Cultural Resource Assessment of Bureau of Land Management Valley Center Site 1.**
1125426	Pigniolo, Andrew And Michael Baksh	Tierra Environmental Services.	2000	Cultural Resource Survey Report for the San Pasqual Firebreaks Project, San Pasqual Indian Reservation, California
1125433	Pigniolo, Andrew	Tierra Environmental Services.	2000	Cultural Resources Survey Report for the Districts A&B Water System Rehabilitation Project, San Pasqual Indian Reservation, San Diego, California
1125496	Roybal, Gerald J.	Gerald J. Roybal	1995	Reconnaissance Survey for the San Pasqual Indian Reservation Proposed Road Surfacing and Construction.
1126305	Case, Robert	Mooney & Assoc.	2000	Cultural Resource Survey Of the 82-Acre Blackwell Property (TPM-20495) Near Valley Center San Diego California

NADB Number	Author	Firm	Year	Title
1126771	Napton, Kyle	American Indian Resource Organization, Inc.	1984	Cultural Resource Investigations for San Pasqual Indian Reservation, California
1127418	Pigniolo, Andrew & Dustin Kay & Stephanie Murray	Tierra Environmental Services	2001	Cultural Resources Survey Report for the San Pasqual Residential Firebreaks Project, San Pasqual Indian Reservation, San Diego County, California
1128114	Duke, Curt	LSA Associates	2002	Cultural Resource Assessment Cingular Wireless Facility No. SD 959-03, San Diego County, CA
1128723	Cook, John R.	ASM Affiliates, Inc.	2000	TPM 20458 (Zappia) Archaeological Survey Cultural Resource Survey Report Form, County Of San Diego
1128724	Clevenger, Joyce M.	James & Briggs Archaeological Services	1999	Cultural Resources Survey
1128725	Cook, John R.	Brian F. Mooney Associates	1993	Archaeological Survey Report for the Richardson Property in Valley Center, CA
1128728	Patterson, Cameron C. & Marina Riley Brand	MSA	1979	Biology/Archaeology Technical Reports For Indian Hills, Ltd.
1129483	Gross, Timothy And Mary Robbins-Wade	Affinis Environmental Services	1989	Cultural Resources Survey and Significance Assessment: Live Oak Ranch, Valley Center, California
1130432	Hector, Susan M.	ASM Affiliates, Inc.	2006	Cultural Resources Sensitivity Analysis for the Carryover Storage and San Vicente Dam Raise Project (CSP) Alternatives Analysis
1130681	Smith, Brian F. And James Clifford	Brian F. Smith And Associates	2006	Cultural Resources Study For The Paradise Mountain Ranch Project, Valley Center, San Diego County, California
1131480	**Hector, Susan M.**	**County Of San Diego Parks And Recreation**	**1992**	**Cultural Resource Survey of Hellhole Canyon Open Space Preserve Utility Easement**
1131575	Cook, John R.	ASM Affiliates, Inc.	1989	Hellhole Letter Report

Previously Recorded Sites Adjacent to Study Area

According to SCIC records, twenty-one archaeological sites and four isolates had been recorded within a one-mile radius of the Preserve. These sites are listed in Table 2. Four of the sites are found within the Preserve and appear in bold in Table 2. These four sites are depicted on Figure 4 in Appendix A.

These prehistoric cultural resources represent a cultural landscape that reflects the subsistence patterns of the Luiseño of the area. The presence of lithics that appear to be made from Santiago Peak material may indicate trade, travel, or both.

Table 2. Cultural Resources Located within One Mile of the Preserve

Primary Number/ Trinomial	First Recorded by	Description	Dimensions	Characteristics
CA-SDI-258	True 1954	Prehistoric Milling	100 m x 100 m	milling features that include mortars and ovals, sherds, mano fragments, pestle fragments
CA-SDI-277	True 1955	Prehistoric Lithic Scatter	100 m x 100 m	Manos, tool fragment, flakes
CA-SDI-663	True 1959	Prehistoric Milling	100 m x 100 m	Mortars
CA-SDI-665	True 1959	Prehistoric Lithic Scatter	100 m x 100 m	Manos, flakes
CA-SDI-666	True 1959	Prehistoric Lithic Scatter	100 m x 100 m	Drilled stone, tools, flakes
CA-SDI-5511	Van Horn 1978	Prehistoric Lithic Scatter	15 m x 15m	Flakes
CA-SDI-6704	Harris 1979	Prehistoric Milling	10 m x 20m	15 slicks, eight mortars, one basin, four flakes
CA-SDI-7965	Cook 1980	Prehistoric Milling	2 m x 4m	Two slicks
CA-SDI-9685	**Noah 1983**	**Prehistoric Milling**	**225 m x 10m**	**Locus A: Two mortars Locus B: One mortar**
CA-SDI-9686	**Noah 1983**	**Prehistoric Milling**	**3.5 m x 7m**	**Five slicks**
CA-SDI-11134	**Cook 1989**	**Prehistoric Milling**	**20m x 15m**	**One slick**
CA-SDI-11135	Cook 1989	Prehistoric Milling	30 m x 20 m	Four basins, five slicks, one mortar
CA-SDI-11136	Banks 1980	Prehistoric Milling	20 m x 100 m	34 flakes, scraper, bifacial mano
CA-SDI-11904	Dillon 1990	Prehistoric Milling	30 m x 70 m	Mortars, slicks, mano
CA-SDI-11906	Dillon 1990	Prehistoric Lithic Scatter	17 m x 7m	flakes
CA-SDI-11907	Dillon 1990	Prehistoric Lithic Scatter	30 m x 7m	flakes
CA-SDI-13393	Glenn *et al.* 1993	Prehistoric Milling	50 m x 60m	Seven slicks, two basins, two mortars, points, sherds, groundstone, midden
CA-SDI-15342/P-37-018321	Pigniolo and Dieter 2000	Prehistoric Milling/Camp	60 m x 40 m	Hearth, three metate fragments, flakes that include five Santiago Peak specimens, unifacial mano
CA-SDI-17335/P-37-026397	Clifford 2005	Prehistoric Milling	5 m x 5 m	One slick
CA-SDI-17336/P-37-026398	Clifford 2005	Prehistoric Milling and Lithic Scatter	33 m x 30 m	Nine flakes, three manos, three metates, one core tool, one precision tool
CA-SDI-18592/ P-37-029026	**Bonnie Packert et al. 2004**	**Lithic Scatter**		**Lithic scatter, core, quartz point (collected)**
P-37-014943	Serr 1990	Isolate	N.A.	Santiago Peak Scraper
P-37-018323	Pigniolo 1999	Isolate	N.A.	Santiago Peak Retouched Flake
P-37-026875	Hale 2004	Isolate	N.A.	Nearly complete Tizon Brown Ware olla *in situ* (collected and curated)
P-37-027122	Schaefer and Hale 2004	Isolate	N.A.	Complete Tizon Brown Ware olla *in situ* (collected and curated)

The SCIC does not archive any site records that describe the Escondido Canal/Flume/San Luis Rey Flume or the homesteads in the area. Ms. Akyüz used other resources, many of them primary documents, to summarize the historical resources that are located in the Preserve. Many of these documents were found at the History Center and at the Pioneer Room.

Available accounts of the history of the Escondido Canal/Flume provide varied, sometimes conflicting, information. An accurate summary of the canal/flume entailed gleaning consistent information from various primary sources that included historic aerials and historic maps.

The Escondido Canal and Flume has connected the San Luis Rey River (or *Quechla* as it is known to the Luiseño) to Lake Wohlford to provide Escondido with water since the late nineteenth century. The damming of Lake Henshaw at the headwaters of the San Luis Rey River began to provide a larger water table to the cities of Escondido and Vista in the 1920s. Luiseño bands in the area are attempting to regain rights to this water since some of it had been diverted from tribal lands.

Hill (2002) maintains, "Escondido Lake, Dam [*sic*] and Canal were constructed to provide water to the Escondido area, which needed irrigation for crops in the valley." The lake and dam to which Hill is referring are Bear Valley Reservoir (Lake Wohlford) and Bear Valley Dam (Wohlford Dam); the public referred to them colloquially as Escondido Lake and Escondido Dam.

Plans for a canal to bring water to Escondido began before 1880 (McGrew 2006). In that year, the San Luis Rey Flume Company failed and disbanded (McGrew 1988). The Escondido Irrigation District was formed in 1887 (Werden 1893; McGrew 2006) to provide water to the growing City of Escondido and its surrounding orchards. The district proposed to bring water from the San Luis Rey River to a reservoir in Bear Valley. A ditch was begun in 1893 (Escondido Times 1893a:3, Escondido Times 1893b per McHenry n.d.). In 1894, the District ordered supplies for the dam and the canal (Jones 1894) and pursued right of way through the Bowman, Gardiner, and Breedlove properties (Gibson and Titus 1894a; Gibson and Titus 1894b). The Gardiner and Bowman properties were located south of the Preserve and south of San Pasqual Indian Reservation in Section 22 of Range 1W, Township 11S. The Escondido Canal now passes through the eastern half of this section. The Breedlove property was located south of the eastern portion of the Preserve in Section 23 of Range 1W, Township 11S (Figure 5).

The District completed the reservoir and canal in 1895. Schuyler (1901:2) notes the original course of the canal/flume. His map was used to draw the original course of the canal on a 2000 aerial photograph (Figure 6). In addition, the course of the previous segment of the canal that can be seen on the aerial was used to draw the original course in Figure 6. Water traveled by flume and canal southwest from the San Luis Rey River through a tunnel in Rodriguez Mountain, around the mountain on a flume/canal, and south across Hellhole Canyon to Bear Valley Reservoir, which was renamed Lake Wohlford in 1924 to honor A.W. Wohlford, Escondido Mutual Water Company superintendent. Schuyler (1901:3) features a photograph of

the flume. The canal boasted "nearly 10 miles of ditches besides considerable flume" (Sickler 1896). Schuyler (1901:5) has stated that the conduit featured a 67, 287-foot ditch built into Rodriguez Mountain (shown in Schuyler 1901:6) and 14,142 feet of flume (Figure 7). The 356-foot long intake tunnel made its course through granite, and another 456-foot long tunnel ran from the canal into a ravine that lead to the dam (Schuyler 1901:5).

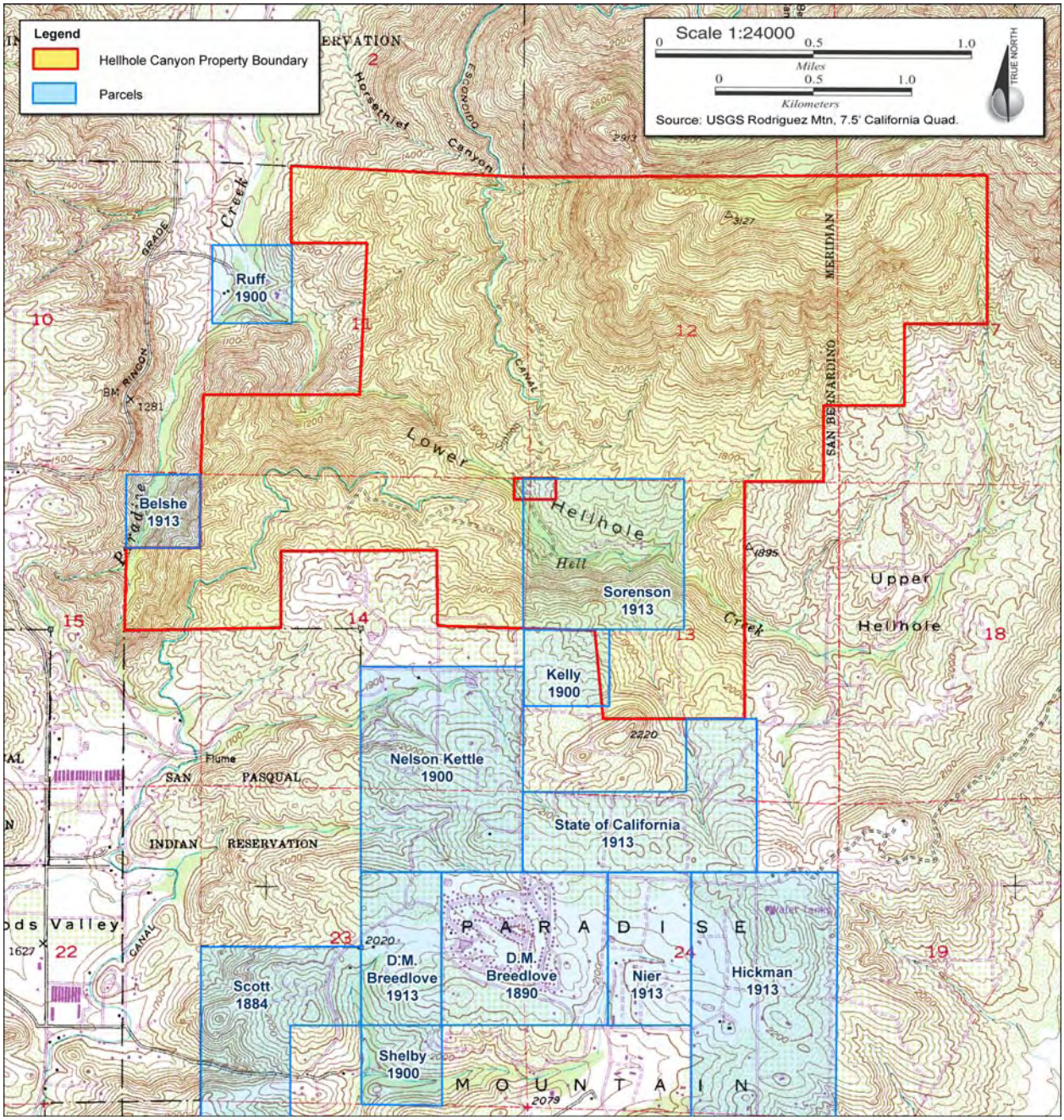

Figure 5. Homestead parcel map based on McHenry (n.d.).

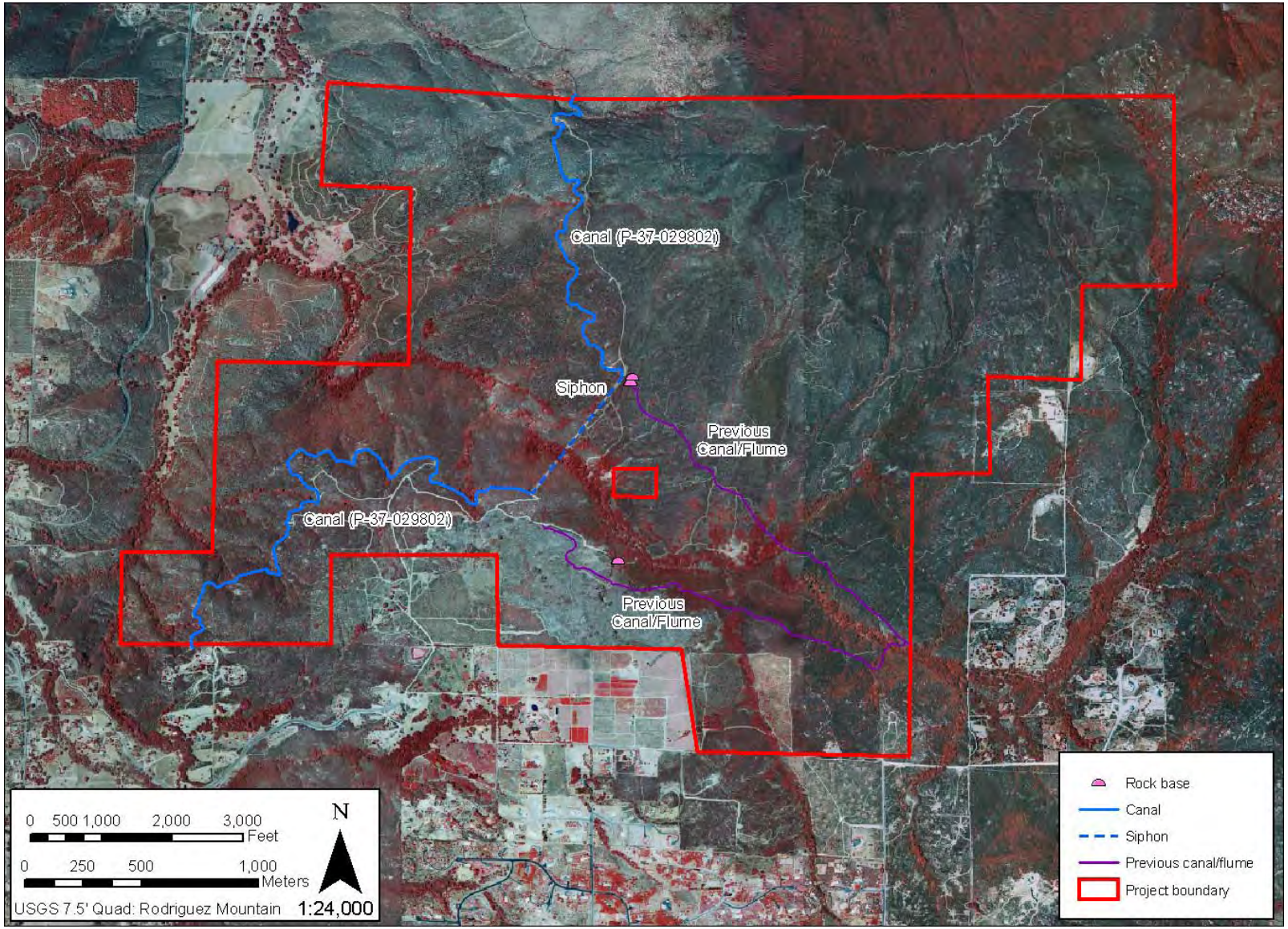

Figure 6. Old canal drawn on 2000 aerial photograph, based on Schuyler 1901:2.

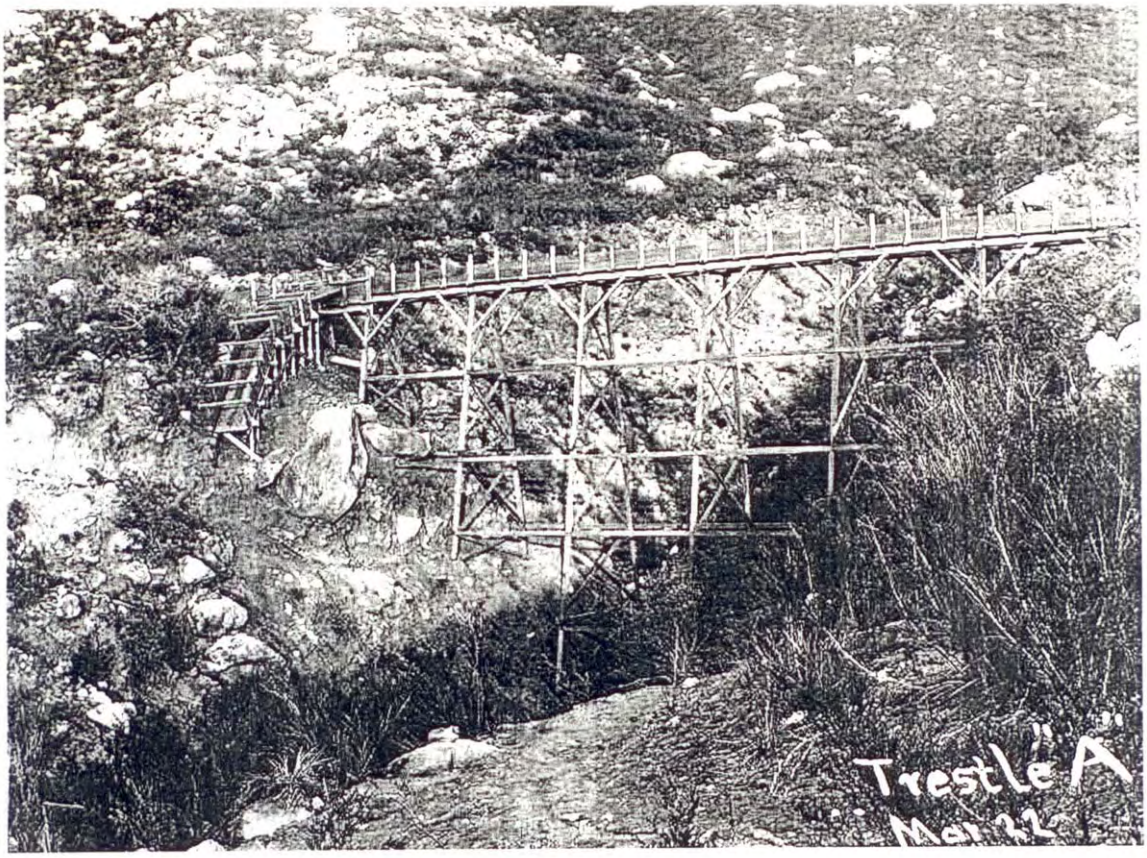

Figure 7. Photograph of flume (on file at History Center and used with permission of Lynne Christensen).

In 1905, the soon-to-be-defunct Escondido Irrigation District bonds were paid, and the water conveyance was assumed by the Escondido Mutual Water Company (McGrew 2006; Ryan 1973). The District had to rebuild parts of the flume in 1909 (Ryan 1973). In 1923, plans to add water from Lake Henshaw were begun and came to fruition in 1926 (Rossi 2006; Vista Irrigation District n.d.). Lake Henshaw supplied water to the Escondido Mutual Water District and to the Vista Irrigation District via the San Luis Rey River. Construction of Vista Flume/Canal, east of Vista and west of the existing Escondido Canal, began in 1924 (Rossi 2006). The canal joined the Escondido Canal and diverted some of the water that originated in Lake Henshaw to Vista (Section Map, circa 1933). A 1925 map of Lake Henshaw shows that the dam leads straight into the San Luis Rey River (San Diego Water Company 1925). From the river, the water went to the Escondido Canal.

The wood from the original Escondido Canal and Flume has been replaced by a concrete canal and metal siphon. Stone footing of what may be the original conveyance is apparent in the preserve. Much of the canal lies outside the Preserve, to the north and to the south. A trail that goes across the northern and southern portion of the Preserve represents a portion of the previous flume, but a decision to change the course of the canal was not apparent in any of the

primary documents. However, the course of the canal/flume was changed dramatically; the change of course may have occurred in 1909 when the District rebuilt portions of the flume. Some of the original course is apparent in the preserve. A photograph of a man who is standing on the siphon appears to have been taken after 1909 (Figure 8). The original canal entered the Preserve from the north, went east on the north side of the canyon along Rodriguez Mountain, went south across Hell Creek in the southeast portion of the Preserve, and continued west to join what is now the portion of the canal south of the siphon (Figure 9).

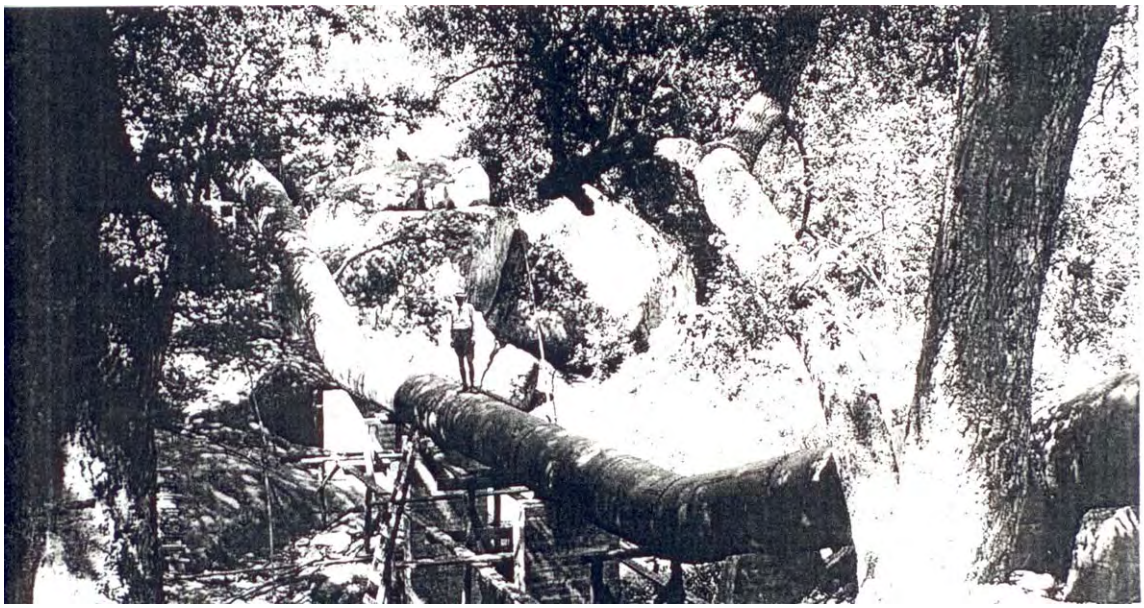

Figure 8. Photograph of siphon (on file at History Center and used with permission of Lynne Christensen).

Essentially, the siphon on the west side of the Preserve replaced the portion of the canal/flume that traveled east on the north side of the canyon, went south across Hell Creek in the southeast portion of the Preserve, and continued west to join what is now the portion of the canal south of the siphon. Currently, the siphon joins the canal on the west side of the preserve. A 1964 aerial photograph shows a linear feature of the current course of the canal in the northern and southern portions of the project area (Historic Aerials 1964; Figure 10). The current course of the canal, which includes the siphon, appears in this aerial and on a 1939 map (USGS 1939).

An image in Schuyler (1901:2) shows that the canal ran along the course of a trail that is apparent on the ground today. Figure 8 shows the course of the old and new canals. An account maintains that the trail, bulldozed by California Department of Forestry crews during the 2007 Poomacha Fire, represents the original course of the canal (Downey 2007).

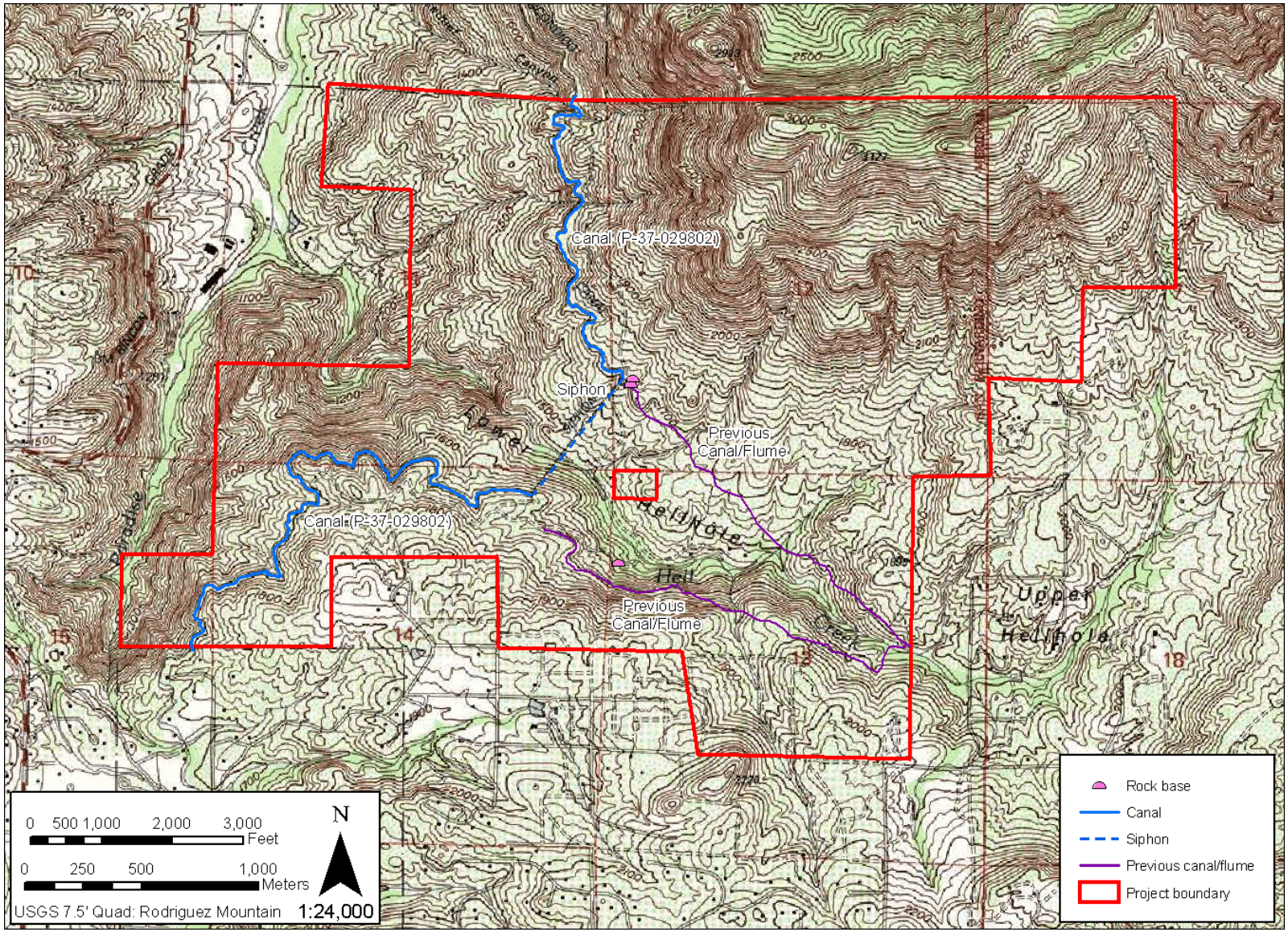

Figure 9. Old canal and new canal on Rodriguez Mountain USGS 7.5-minute quadrangle map.

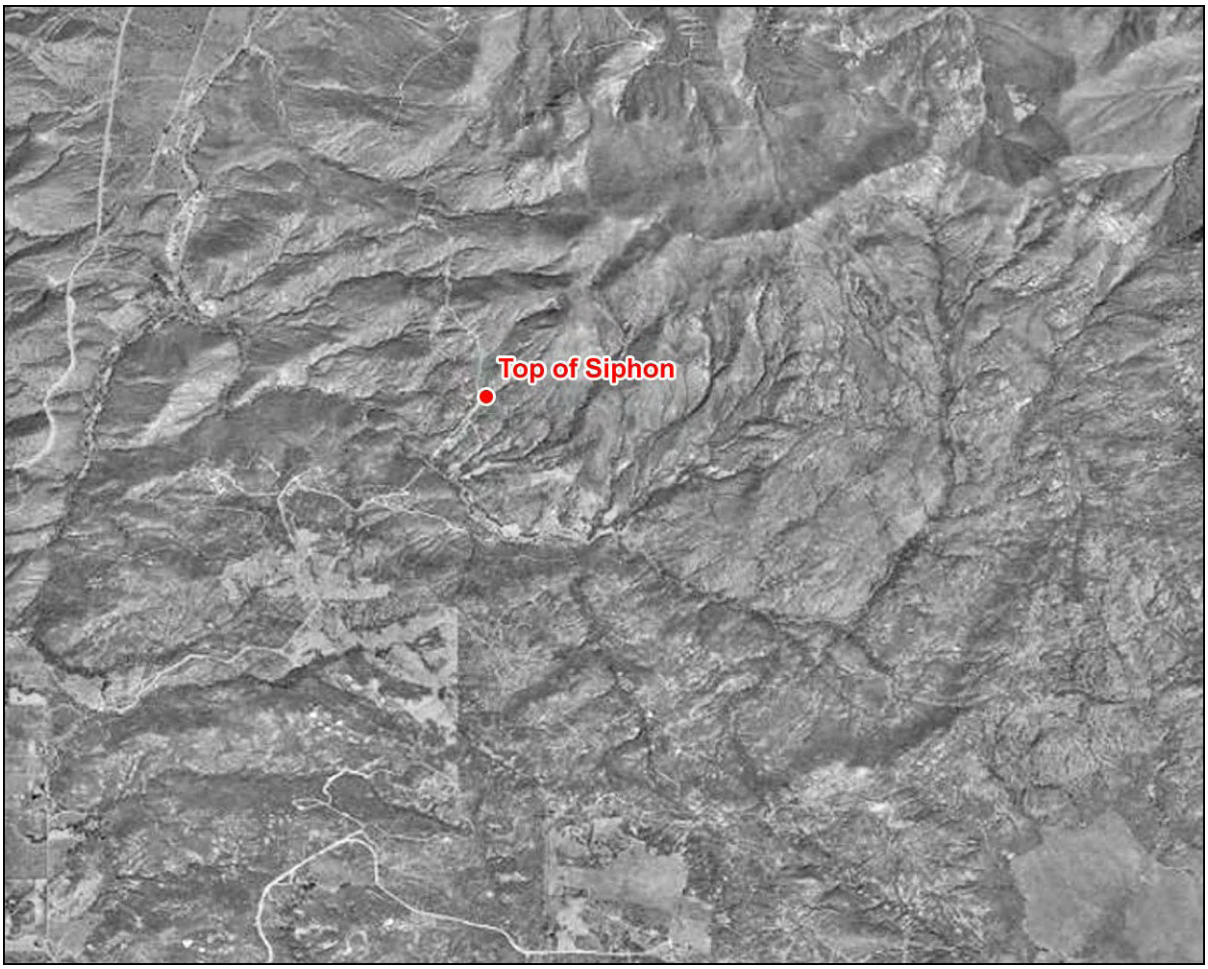

Figure 10. New canal as it appears on 1964 aerial photograph.

From the maps and aerials, the course of the canal that lies outside the project area has remained the same. The 1939 USGS Palomar Mountain 15-minute quadrangle map shows a road where the southern trail/old course of canal lies now (USGS 1939). On the map, the road goes from a fork of Hell Creek west to what is currently called Canal Road, which leads into San Pasqual Indian Reservation.

Ryan (1973:69) maintains that Rodriguez Mountain was named for a "prominent Indian Reservation family". Stein (1975) has reported (per Abe Rodriguez) that many Christianized Indians held the surname. Rodriguez remembers a Rodriguez family that lived at the base of Rodriguez Mountain at Rancho Cuca (Stein 1975). A turn-of-the-last-century Department of the Interior Map and the USGS 1939 Palomar 15-minute quadrangle map refer to the mountain as "Roderick Mountain" (Department of the Interior 1900; USGS 1939).

Several explanations of the origin of the name of Hellhole Canyon have been offered. Most refer to the heat of the canyon and to an antithesis to Paradise Mountain to the south; others refer to the difficulty of access in and out of the canyon. (McHenry n.d.; Stein 1975.) Stein

(1975) has confirmed that Horsethief Canyon received its name because it was a place to hide stolen horses on route to Mexico in the 1870s and 1880s.

Fred and Anna Brady homesteaded 160 acres at the mouth of Hellhole Canyon in the 1900s, and John Kelly, W.F.C. James, and H.F. Neir had their homesteads east of San Pasqual Indian Reservation and south of the Preserve (McHenry n.d). M. Sorenson who began homesteading in 1913 appears to be the only homesteader that held property within what is now the Preserve (McHenry n.d.). John Kelly held a 40-acre homestead south of Sorensen's homestead and just south of what is now the Preserve (Figure 4). Part of the 160 acres that belonged to Sorensen became the Brown Property and the Pulver Property/APN 189-081-24) (County of San Diego 2007). This portion of the Preserve is the most recently acquired (Figure 11).

Fred and Anna Brady homesteaded south of what is now the Preserve (*Escondido Times* 1906, per McHenry n.d.). Anna, widow of John Kelly, maintained the original homestead she had shared with the deceased (*Escondido Times* 1906, per McHenry n.d.). A squatter on their property, Howard Gore, killed the Bradys (*Escondido Times* 1906, per McHenry n.d.). The account in the *Escondido Times* maintains that Gore fired upon Fred Brady and killed him. Anna Brady then shot Gore in the heart and killed him; as he fell his rifle shot Anna Brady in the head and killed her.

1.3 APPLICABLE REGULATIONS

Cultural resource regulations that apply to the project area are the County of San Diego Resource Protection Ordinance (RPO), the San Diego County Local Register of Historical Resources, the California Environmental Quality Act (CEQA), the California Register of Historic Places (CRHP), and the National Historic Preservation Act (NHPA) that determines eligibility for the National Register of Historic Places (NRHP).

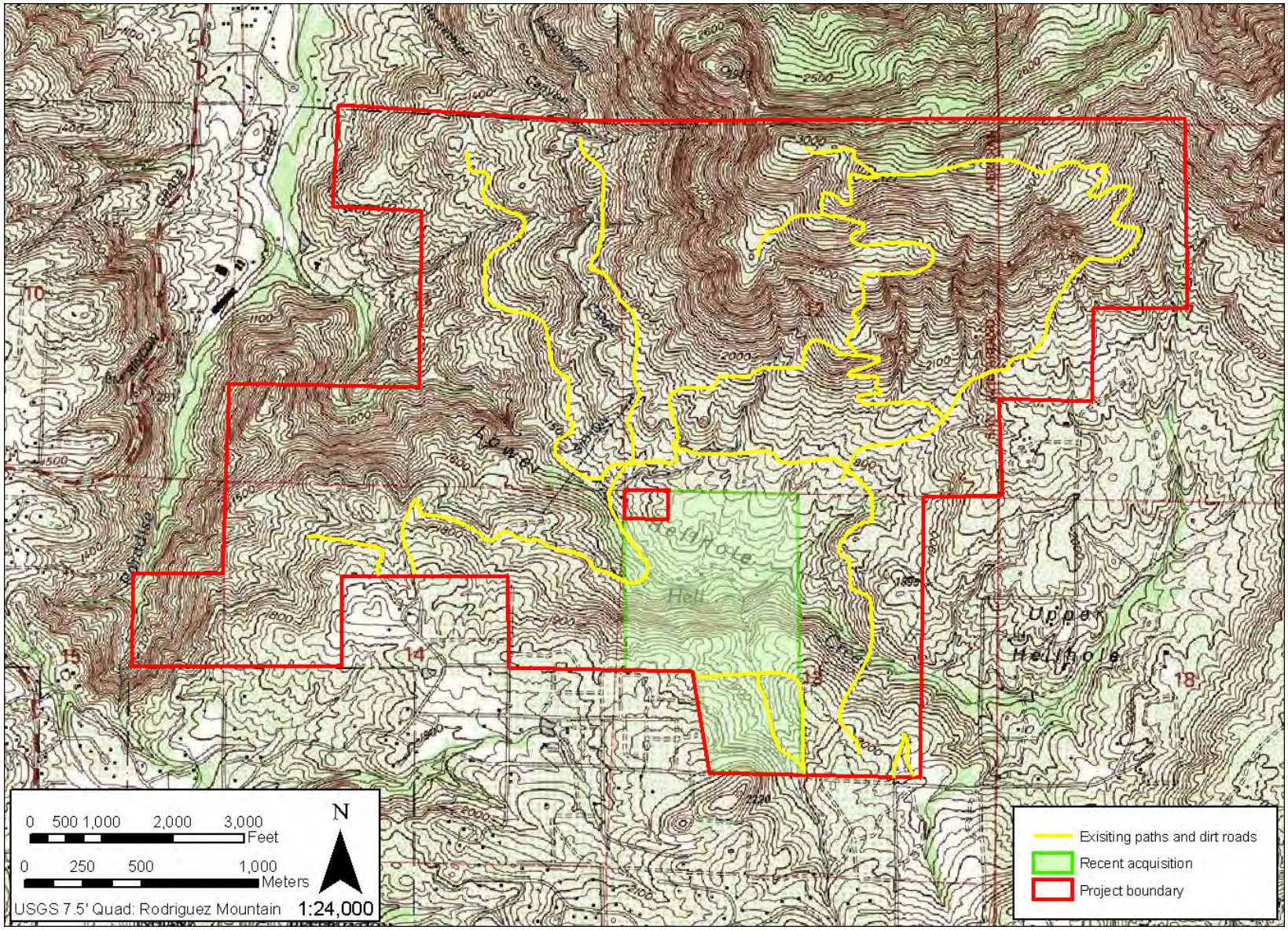

Figure 11. Recently acquired portion of Preserve.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

The County uses the CRHP criteria to evaluate the significance of cultural resources. In addition, other regulations must also be considered during the evaluation of cultural resources. Specifically, the County of San Diego's Resource Protection Ordinance (RPO) defines significant prehistoric and historic sites.

2.1 COUNTY OF SAN DIEGO RESOURCE PROTECTION ORDINANCE (RPO)

The county defines a significant prehistoric and historic site under RPO as follows:

- Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
- Formally determined eligible or listed in the National Register of Historic Places; or
- To which the Historic Resource (H designator) Special Area Regulations have been applied; or
- One of a kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data or materials; and
- Any location of past or current sacred religious or ceremonial observances which is either:
- Protected under Public Law 95-341, the American Religious Freedom Act, or Public Resources Code Section 5097.9, such as burials, pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
- Other formally designated and recognized sites that are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

2.2 SAN DIEGO COUNTY LOCAL REGISTER OF HISTORICAL RESOURCES

The county maintains a San Diego County Local Register of Historical Resources. The Register was modeled after the California Register of Historic Places. Significance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture. Any resource that is significant at the national or state level is by definition significant at the local level.

The criteria for eligibility the Local Register are comparable to the criteria for eligibility for the California and National registers, but significance is evaluated at the local level.

1. Resources associated with events that have made a significant contribution to the broad patterns of California or San Diego County's history and cultural heritage.
2. Resources associated with the lives of persons important to our past, including the history of San Diego and our communities.
3. Resources that embody the distinctive characteristics of a type, period, region (San Diego County), or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Resources that have yielded or are likely to yield, information important in prehistory or history.
5. Districts are significant resources if they are composed of integral parts of the environment not as individual elements, but collectively are exceptional or outstanding examples of prehistory or history.

The county also treats human remains as "highly sensitive". They are considered significant if interred outside a formal cemetery. Avoidance is the preferred treatment.

2.3 THE CALIFORNIA REGISTER OF HISTORIC PLACES AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. It defines historical resources as "any object, building, structure, site, area, or place that is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Division I, Public Resources Code, Section 5021.1[b]).

Lead agencies have a responsibility to evaluate historical resources against the California Register criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project that demolishes or alters those physical characteristics of an historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance.

The California Register is used in the consideration of historic resources relative to significance for purposes of CEQA. The California Register includes resources listed in, or

formally determined eligible for listing in, the National Register of Historic Places and some California State Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory may be eligible for listing in the California Register and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) consisting of the following:

(1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or

(2) It is associated with the lives of persons important to local, California, or national history; or

(3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or

(4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

2.4 NATIONAL REGISTER OF HISTORIC PLACES AND THE NATIONAL HISTORIC PRESERVATION

If federal funds or permits are involved in a project, the National Register of Historic Places criteria are relevant and used to analyze adverse effects from project implementation. The National Historic Preservation Act established the National Register of Historic Places in 1966.

2.4.1 Criteria for Evaluation

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) that are associated with the lives of persons significant in our past; or

(c) that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded, or may be likely to yield, information important in prehistory or history.

Criteria considerations. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

(a) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

(b) A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

(c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life.

(d) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

(e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

(f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

(g) A property achieving significance within the past 50 years if it is of exceptional importance.

3.0 RESEARCH DESIGN

Research issues that can be addressed with reconnaissance survey data include prehistoric and historic site functions and settlement/subsistence patterns. Although limited to surface observations only, the results of the survey can be used to analyze human use of the landscape.

Site Functions
Seven types of sites could be present within the Preserve:

Prehistoric Residential
These sites are areas where groups ranging from an extended family to a larger band lived for much of the year. Activities that took place in the residential site included food preparation, food storage, tool and implement production, ceremonial and religious activities, and recreation. Archaeological evidence for a residential site includes evidence for stone tool manufacturing (stone flakes and debris, finished tools, cores), food preparation (grinding tools such as manos and metates, cooking hearths made of stone with charcoal inside, cooking and storage pots, tools used to produce baskets such as awls), and the physically altered ground surface (midden soils).

Prehistoric Seasonal or Temporary
Similar to residential sites, these locations are where small groups gathered to stay and exploit a specific resource such as ripening acorns or flower seeds. Archaeologically, these sites would be smaller in size than residential sites, and would not have evidence for a full range of subsistence activities; for example, tool manufacturing may have been a limited activity at an acorn processing campsite.

Prehistoric Special Use
These sites are even more focused in the activities conducted, perhaps with only one represented. Examples of special use sites are quarry locations where the raw materials for stone tools were obtained, isolated bedrock processing areas where slicks were used to process plants, and clay sources. Archaeological evidence would include shatter from quarrying, bedrock milling features, and pits in clay beds.

Prehistoric Ceremonial
Ceremonial sites include rock paintings (pictographs), rock etchings and pits (petroglyphs), cairns, and shrines. These are often regarded as sacred sites by modern Native Americans. Archaeological evidence would include the rock art itself, rock piles and alignments, and shelters or landmark rocks.

Prehistoric Trails
Trails exist throughout the region, indicating travel for trade and social communication. Prehistoric trails have often disappeared into thick vegetation, but cleared areas, walls, and shelters are found archaeologically under certain conditions.

Prehistoric Isolates

Isolated artifacts indicate the presence of people in the area, but not much more can be learned from them. Archaeologists may find a single potsherd, a flake, or a projectile point with nothing else nearby.

Historic Resources

In the project area, a historic resource would include a homestead, landscaping such as an orchard or windbreak, a refuse pile or pit, and a historic feature such as a flume/pipeline, road, cistern, tank, corral, or mine. Archaeological evidence could consist of piles of debris, cans, bottles, lumber, concrete footings, mine shafts and adits, flumes and canals, surviving landscape elements, and pits.

The records search for Hellhole Preserve indicated that most of the previously recorded sites in the vicinity of the project area consist of Special Use sites (milling sites and scatters of stone artifacts). Of particular note is the discovery of stashed ollas. The results of the survey support the records search results, with specialized milling sites, isolates, and historic features and homestead areas identified.

Settlement/Subsistence Patterns

Prehistoric settlement patterns in the region are highly focused on the San Luis Rey River, with large residential sites clustered along the banks of this major drainage. Satellite seasonal camps and special activity sites would be expected away from the river, for exploitation of resources such as acorns, small seeds, basketry materials, raw stone tools, and game animals. An area like Hellhole Canyon would have been a travel corridor between special activity sites and the residential locations, and would be expected to have seasonal processing camps that were established to process plant and animal materials. In terms of historic settlement, this area would not be expected to contain dense populations or large settlements, since farming and agriculture would be difficult given the topography and climate.

These expectations are supported by the results of the survey, which indicated the Hellhole Canyon area was used for special activities during prehistory, and was sparsely settled during the historic period. In terms of prehistoric special activities, milling was a major focus in the project area. Mortars, slicks, and oval basins were found—without extensive evidence for habitation or camping. Cupules, which are a type of petroglyph that is a pit ground into a boulder, were found at one of the milling sites. Cupules are associated with habitation sites, more specifically with milling features, and are interpreted to have a ceremonial or religious use in the southern California region. In terms of settlement pattern, people made a purposive visit to the Preserve area to process materials and, perhaps, conduct a ceremony. Longer term residential occupation did not take place in Hellhole Canyon.

4.0 ANALYSIS OF PROJECT EFFECTS

Potential effects of the project were evaluated through the field survey. The results of the field survey were used to analyze potential future effects of projects. DPR will be proposing additional trails for the most current acquisition added to the Preserve (APN 189-081-24). These trails will link to the existing trails within the Preserve.

4.1 METHODS

4.1.1 Survey Methods

On February 28, 2008, Associate Archaeologist Linda Akyüz, Associate Archaeologist Michael Garnsey, and Native American Monitor Carmen Lucas of the Laguna Mountain Kwaaymii Band monitored the placement of biological pitfall arrays to ensure protection of cultural resources. All areas they visited were later surveyed by Ms. Akyüz and a Luiseño monitor. Luiseño monitors included Mr. Charlie Devers of the Pauma Band and Mr. Luke Dixon of the Pauma Band. During April and May 2008, a survey team that consisted of one associate archaeologist and a Luiseño Native American monitor surveyed the Preserve for cultural resources. On several occasions, an assistant archaeologist joined the team.

The ASM Affiliates field crew conducted archaeological surveys in the 439 acres of the Preserve that are located on a slope of twenty percent or less. The team surveyed above the twenty percent slope in areas of previously recorded sites, to investigate bedrock for milling, and to reach the flatter survey areas.

The crew walked in 15-meter transects in order to identify archaeological features and artifacts and checked all bedrock within the survey area of less-than-twenty-percent slope for milling features. The crew mapped observed cultural resources with the Trimble® GeoHX Global Positioning System (GPS) position recorder. The crew recorded all features, artifact concentrations, and artifacts into the GPS unit to be processed into Geographical Information Systems maps. The crew kept notes about sites, features, and artifacts and took photographs. These notes and photographs are on file at ASM.

4.1.2 Test Methods

The cultural resources were not tested through excavation; thus, this study category does not apply to this investigation.

4.1.3 Laboratory and Cataloging Procedures

Artifacts were not collected; thus, this study category does not apply to this investigation.

4.1.4 Curation

Artifacts were not collected; thus, this study category does not apply to this investigation.

4.1.5 Native American Participation /Consultation

All communication with Native American Representatives can be found in Appendix B. On January 28, 2008, Michelle Dalope of ASM Affiliates requested that the California Native American Heritage Commission (NAHC) search their files for any recorded Traditional Cultural Properties, burials, or Sacred Lands within one mile of the project survey area. The NAHC did not identify Sacred Lands or cultural resources within the project. The NAHC provided a list of Native American contacts; Ms. Dalope sent letters out to the tribal representatives who are listed on the NAHC list (Appendix A) on February 12, 2008 to inform them of the baseline surveys of the Preserve. Ms. Dalope contacted Native American representatives Allen E. Lawson, Chairperson of the San Pasqual Band of Mission Indians, Carmen Lucas of the Kwaaymii Laguna Band of Mission Indians, Ron Christman of the Kumeyaay Cultural Historic Commission, Mark Romero, Chairperson of the San Luis Rey Band of Mission Indians, Clint Linton of the Santa Ysabel Band of the Mission Indians, Shasta Gaughen of the Pala Band, Angela Veltrano of the Rincon Band of Mission Indians, Kristie Orosco of the Rincon Band of Mission Indians, the Pauma Yuima EPA, Christobal C. Devers of the Pauma Yuima Band, Charlie Devers of the Pauma Yuima Band, and Rob Roy of the La Jolla Band of Mission Indians.

Joe Nixon of the Pala Band responded to Ms. Dalope by post on February 21, 2008 and Dave Toler of the San Pasqual Band responded to Ms. Dalope by post on March 25, 2008. Ms. Akyüz responded to the letters when they were passed along to her. Ms. Akyüz responded via electronic mail to Dr. Nixon on March 31, 2008, and he responded the same day. Dr. Nixon and Ms. Akyüz exchanged e-mails again on April 1, 2008. On March 10, 2008, Ms. Akyüz discussed the project with David Toler of the San Pasqual Band. On April 23, 2008, when she received his letter of March 25, she responded by post. The content of these exchanges is found in Appendix B.

Native American Monitors Charlie Devers of the Pauma Yuima Band of Luiseño Indians and Luke Dixon of the Pauma Yuima Band of Luiseño Indians participated in the survey and served as consultants and monitors during the survey. Mr. Devers or Mr. Dixon was present during the entire survey. Carmen Lucas of the Kwaaymii Laguna Band accompanied ASM staff during the monitoring of pitfall array placement. Ms. Lucas wrote a letter to Ms. Akyüz after Ms. Lucas surveyed and monitored for the pitfall array placement. This letter can be found in Appendix B. Mr. Devers and Mr. Dixon visited all the areas that were visited during the pitfall array placement monitoring.

4.2 RESULTS

The survey crew identified numerous cultural resources within the Preserve (Figures 12 and 13, Appendix A). Records of these cultural resources have been submitted and are on file at the SCIC. The records for these sites and isolates are confidential and are being provided to the County (Appendix C). The cultural resources include bedrock-milling complexes, a lithic and ceramic scatter, a homestead that may represent the Sorensen property, and the Escondido

Canal/Flume. Some of the bedrock in the project area was extremely exfoliated, perhaps as a result of fires in the area. The crew visited previously recorded sites and noted any features or artifacts that may not have been recorded for that site. Three previously unrecorded sites and one previously unrecorded feature were recorded. Two previously unrecorded isolates were recorded, and one site record was updated.

4.2.1 Sites

P-37-025798/CA-SDI-19058/HH-3

This prehistoric bedrock milling site contains one slick, three ovals, two mortars, and 2 cupules. The bedrock was burnt and carbonized from the 2007 Poomacha Fire. Ashes filled the milling surfaces.

P-37-025799/CA-SDI-19059/HH-2

This historic homestead site contains historic and modern foundations, stone walls and foundations, a cattle pond to west of foundations, chicken wire, fence posts, piping, and a road to site. It may represent the Sorenson/Brown/Pulver (APN 189-081-24) Property. The standing portions of the buildings appear to have been burned down.

P-37-025800/CA-SDI-19060/HH-1

This prehistoric bedrock milling site contains one slick, three quartz flakes, and four Tizon Brown Ceramic sherds. One of these sherds was a rim sherd with a basket imprint on the inside.

P-37-029802/Escondido Canal/San Luis Rey Flume

This historic canal/flume was built in 1894 and has been carrying water since 1895. Associated features include stone shoring, the siphon, and affiliated roads. Elements continue outside of the Preserve. The canal reached from San Luis Rey River, through power station and tunnel (Rodriguez Mountain), through the Preserve down to Lake Wohlford/Lake Wohlford Dam (formerly Bear River Reservoir/Dam and Escondido Reservoir/Dam). The canal had been shored with wood and was also called the San Luis Rey Flume. All the wood is gone. Canal/Flume had gone around Rodriguez Mountain from the river and passed through a tunnel that was built in 1900. Evidence of where it went around the mountain to the north of the Preserve is outside the survey area. The canal portion that is recorded here is not the portion that went around the northern portion of Rodriguez Mountain. The wood from the original Escondido Canal and Flume has been replaced by a concrete canal and metal siphon. Some stone wall footing of what may be the original conveyance is apparent in the Preserve. Much of the canal lies outside the Preserve, to the north and to the south. A trail that goes across the northern and southern portion of the Preserve may represent a portion of the previous flume, but a location change was not apparent in any of the primary documents. A 1964 aerial photograph does show a linear feature in the northern and southern portions of the project area. The current course of the canal, which includes the siphon, appears in this aerial and on a 1939 map (USGS 1939). A trail where this linear feature appears in the northern and southern

portions of the project area is apparent on the ground today. An image in Schuyler (1901) shows the canal to run along the course of this trail. Another account maintains that this trail, subsequently bulldozed by California Department of Forestry crews during the 2007 Poomacha Fire, represents the original course of the canal (Downey 2007). The change of course may have occurred in 1909 when the District rebuilt portions of the flume. From the maps and aerials, the course of the canal that lies outside the project area has remained the same. The 1939 USGS Palomar Mountain 15-minute quadrangle map shows a road where the southern trail lies now (USGS 1939). On the map, the road goes from a fork of Hell Creek west to what is currently called Canal Road, which leads into San Pasqual Indian Reservation.

The original canal/flume from the river was begun in 1894 and finished in 1895. More water was released from Lake Henshaw in 1926 that flowed to the canal via the river (and then to the Vista Canal). Water from Lake Henshaw flowed into the river. The California Department of Forestry crews bulldozed the trail as a firebreak during the 2007 Poomacha fire.

P-37-029803/Pecked Cobble

This pecked cobble isolate was located near P-37-025798/CA-SDI-19078/HH-3.

P-37-029804/Quartz Point

This quartz point isolate was a complete Cottonwood Triangular Point found on a slope.

CA-SDI-9685

This site had been recorded as Locus A that contained two mortars and Locus B that contained one mortar. We confirmed the two mortars at Locus A. Our survey found that three slicks were located on some boulders just west of Locus A and that a green volcanic flake was located east of Locus A. We named the area with the three slicks Locus C. Locus B was found to have two mortars, not one. The one previously undiscovered mortar had been filled with dirt and leaves.

Noah recorded the site in 1983 and recommended avoidance. It does not appear that the site was tested for significance.

CA-SDI-9686

This site had been recorded as bedrock with five slicks. We did not relocate the site. The site is mapped on the edge of the Preserve in an area of over 20% slope (Figure 10).

Noah recorded the site in 1983. It does not appear that the site was tested for significance.

CA-SDI-11134

This site had been recorded as one slick on a large bedrock outcrop. It has been tested for significance and was deemed not significant under CEQA. The bedrock was located but the

slick was not found. The site had been plotted north of a large (100m²) bedrock outcrop. The smaller bedrock outcrop that is cited in the record is assumed to be within this larger outcrop.

CA-SDI-18592/P-37-029026

The Friends of Hellhole Canyon had recorded this lithic scatter. The original site record indicates that some artifacts had been collected but does not indicate testing. No report accompanied the site record. Our crew found the area of the site but did not see any lithic artifacts.

5.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

5.1 RESOURCE IMPORTANCE

Designating sites based upon relative distances between cultural resources can seem arbitrary, especially when studying a cultural group that occupied different areas at different times. Archaeologists may create separations between sites where none should exist. People likely moved freely from one site to another; thus the sites are connected through associated uses and perhaps kinship. Archaeologists designate sites through the interpretation of features, artifacts, and their spatial relationships to each other. Site designations are derived from physical evidence. The sites in this survey are likely associated with each other and with other sites in the region. The Preserve represents a cultural landscape that contains sites and natural features that are related to each other.

The sites in the area (individually or as part of a district) may be considered significant under the County of San Diego RPO, the San Diego County Register of Historical Resources, CEQA, and NRHP guidelines because of their association with the prehistory of the Luiseño people of the area. One site, CA- SDI- 11134, has been tested for significance but was determined not to be significant under CEQA. Dave Toler of the San Pasqual Band has noted that the Preserve is within Luiseño ancestral land (see Appendix B). Unique artifacts were identified and may reveal trade patterns and processes. Isolates P-37-029803 and P-37-029804 are considered not significant because they are isolates and not sites. The prehistoric archaeological sites within the Preserve (except for CA- SDI- 11134) appear to meet Criterion 1 of the County of San Diego RPO, Criteria 1, 2, 4, and 5 of the San Diego County Local Register of Historical Resources, Criteria 1 and 4 of the California Register of Historic Places, and Criteria A and D of the National Register of Historic Places.

Sites that should be considered significant are CA-SDI-9685, CA-SDI-9686, CA-SDI-18592, CA-SDI-19058, CA-SDI-19059, CA-SDI-19060, and P-37-029802. These sites may be associated with the traditional cultural landscape of the region and represent seasonal occupation and use of the canyon. Native Americans have also identified these areas as sensitive for their cultural values. As archaeological sites, the resources also contain information important to the prehistory of the San Diego region. The integrity of these resources is good since the existing trails do not appear to have caused impacts. Because further investigation is needed to make eligibility recommendations, these resources will be treated as eligible for the purposes of this project. Formal eligibility evaluations were beyond the scope of the inventory project. Such evaluations require additional field research, analysis, and documentation.

Historic resources such as the canal and the homestead appear to meet Criterion 1 of the County of San Diego RPO, Criteria 1, 2, and 4 of the San Diego County Local Register of Historical Resources, Criteria 1 and 4 of the California Register of Historic Places, and

Criteria A and D of the National Register of Historic Places. They represent broad patterns of United States, California, and San Diego County History: the development of California agriculture and its need for irrigation and the homesteading days. Although the homesteads have been burned down, the foundations and remaining structures (such as ponds and tanks) may provide data for further research.

5.2 IMPACT IDENTIFICATION

The existing trails on the Preserve intersect or are adjacent to archaeological sites that were identified during the inventory survey. If park visitors do not stray from the existing designated trails to damage the sites, these sites may maintain their integrity. DPR is proposing to construct additional trails in the Preserve at some time in the future. Additional field surveys and impact analyses may be necessary for these proposed trails when the project areas have been identified if cultural resources cannot be avoided.

6.0 MANAGEMENT CONSIDERATIONS – MITIGATION MEASURES AND DESIGN CONSIDERATIONS

6.1 UNMITIGATED IMPACTS

6.1.1 Mitigation Measures and Design Considerations

The project will not have any unmitigated impacts. DPR will avoid impacts through design considerations as discussed below.

6.2 MITIGATED IMPACTS

6.2.1 Mitigation Measures and Design Considerations

Under CEQA, environmental impacts to archaeological sites that meet the California Register criteria must be evaluated during the County of San Diego's project approval process. The County acquired the Preserve as part of the DPR preserve system. Currently, the property is accessible to the public by trail.

If visitors keep to the current designated trails, the sites within the Preserve will not be impacted by park use. However, damage could occur if park visitors enter the sites. DPR is proposing to construct additional trails in the Preserve; therefore, additional field surveys and impact analyses will be necessary for these proposed trails. The following measures are proposed to ensure further protection of the resources:

1. Actively protect archaeological sites.
    a. DPR will determine if damage is noted at the sites.
    b. Limit road/trail maintenance within the site boundaries, lifting the equipment blade so that no grading occurs. If periodic grading or maintenance is required, an archaeologist and Native American monitor should be present to ensure that the site is not damaged. This alternative may be successful and used instead of capping in areas that are relatively level and require minimal maintenance.
    c. Monitor site condition once a year. Photo-document the site condition so that comparisons can be made over time. More aggressive measures may be needed if vandalism and damage continue or increase.

2. Consult with Native Americans to identify concerns about trails and trail use. The consultation process should be established as an ongoing relationship.

6.3 EFFECTS FOUND NOT TO BE SIGNIFICANT

Most of the cultural resources located within the project area have not been evaluated for eligibility for inclusion in the San Diego County Local Register of Historical Resources, the California Register of Historic Places, or the National Register of Historic Places; therefore, under the county guidelines, they are treated as significant and eligible.

The one site that has been evaluated with subsurface testing, CA-SDI-11134, was deemed not significant under CEQA. Isolates P-37-029803 and P-37-029804 are considered not significant because they are isolates and not sites.

DPR will determine how to implement the recommended measures so that any future project will not result in significant adverse impacts or effects.

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8.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

The following personnel contributed to this technical report:

ASM Principal Investigator Susan Hector, Ph.D., and Associate Archaeologist Linda Akyüz supervised and conducted field work and wrote this technical report. Ms. Akyüz researched the records for prehistoric and historic background of the area. ASM Desktop Publishers Marcia Sandusky and Suzanne Slade formatted the report. ASM Graphic Artists Tyshanna Belcher and Zee Malas contributed graphics to the report. GIS Specialist Alice Brewster designed GIS shapefiles and graphics. Project Historian Sarah Stringer-Bowsher, M.A., and Principal Investigator Sinéad Ní Ghabhláin, Ph.D., assisted Ms. Akyüz in finding documentation of the previous canal/flume route. ASM Assistant Archaeologist Andrew Lown surveyed the project area with Ms. Akyüz.

ASM contacted David Singleton, Coordinator of the NAHC, for information on known cultural resources in the area and for a list of Native American representatives with whom to consult. ASM contacted Native American representatives Allen E. Lawson, Chairperson of the San Pasqual Band of Mission Indians, Carmen Lucas of the Kwaaymii Laguna Band of Mission Indians, Ron Christman of the Kumeyaay Cultural Historic Commission, Mark Romero, Chairperson of the San Luis Rey Band of Mission Indians, Clint Linton of the Santa Ysabel Band of the Mission Indians, Shasta Gaughen of the Pala Band, Angela Veltrano of the Rincon Band of Mission Indians, Kristie Orosco of the Rincon Band of Mission Indians, the Pauma Yuima EPA, Christobal C. Devers of the Pauma Yuima Band, Charlie Devers of the Pauma Yuima Band, Rob Roy of the La Jolla Band of Mission Indians. Joe Nixon of the Pala Band responded to Ms. Dalope by post on February 21, 2008 and Dave Toler of the San Pasqual Band responded to Ms. Dalope by post on March 25, 2008. Ms. Akyüz responded to the letters when they were passed along to her. Ms. Akyüz responded via electronic mail to Dr. Nixon on March 31, 2008, and he responded the same day. Dr. Nixon and Ms. Akyüz exchanged e-mails again on April 1, 2008. On March 10, 2008, Ms. Akyüz discussed the project with David Toler of the San Pasqual Band. On April 23, 2008, when she received his letter of March 25, she responded by post.

Native American Monitors Charlie Devers of the Pauma Yuima Band of Luiseño Indians and Luke Dixon of the Pauma Yuima Band of Luiseño Indians participated in the survey and served as consultants and monitors during the survey. Mr. Devers or Mr. Dixon was present during the entire survey. Carmen Lucas of the Kwaaymii Laguna Band accompanied ASM staff during the monitoring of herpetology trap placement. Ms. Lucas wrote a letter to Ms. Akyüz after Ms. Lucas surveyed and monitored for the pitfall array placement. This letter can be found in Appendix B. Charlie Devers and Luke Dixon visited all the areas that were visited during this monitoring.

ASM contacted the San Diego County Office of Historic Archives and conducted a records search at the Province House. San Diego County Historian Lynne N. Christenson, Ph.D. and San Diego County History Research Assistant Ellen Sweet provided the results of their previous research and numerous records for the technical report. ASM contacted the SCIC in order to request a record search.

ASM contacted Pioneer Room Archivist Helene Idels and Assistant Archivist Nancy Salisbury and conducted a records search of Escondido Irrigation District and Escondido Mutual Water Company primary documents. Ms. Akyüz would like to acknowledge and thank Ms. Salisbury for all her help in retrieving the many boxes of documents.

8.1 ACKNOWLEDGEMENTS

ASM Affiliates would like to acknowledge San Diego County Historian Lynne N. Christensen, Ph.D. and San Diego County History Research Assistant Ellen Sweet for their previous research and for providing ASM with numerous records. They have compiled and summarized an extensive array of primary documents, articles, and excerpts from books that provided invaluable background for our study of the region and for this report.

ASM Affiliates would like to acknowledge Nancy Salisbury for all her help in retrieving the many boxes of documents at the Pioneer Room and would like to acknowledge Helene Idels and Nancy Salisbury for maintaining these documents and making them accessible to researchers. These primary documents were invaluable to our research.

9.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Table 3 lists cultural resources within the Preserve, proposed mitigation measures, and design considerations that were the basis of these measures.

Table 3. Proposed Mitigation Measures and Design Considerations

Site Number	Mitigation/Impact Avoidance Measures			Design Consideration: County Preserve
	None needed	Cap site if impact detected	Fence trail as determined by County	
CA-SDI-9685	X			X
CA-SDI-9686	X			X
CA-SDI-11134	X			X
CA-SDI-18592 P-37-029026	X			X
P-37-025798 CA-SDI-19058	X			X
P-37-025799 CA-SDI-19059	X			X
P-37-025800 CA-SDI-19060	X			X
P-37-029802 Escondido Canal/ San Luis Rey Flume	X			X
P-37-029803/Pecked Cobble	X			X
P-37-029804/Quartz Point	X			X

APPENDICES

APPENDIX A

Confidential Figures

APPENDIX B

Native American Consultation

APPENDIX C

Site Records

Provided on CD

APPENDIX D

Shape Files

Provided on CD